

The photosensitive resin composition contains polysilane having a structure represented by the formula (in which each of R1-R4 is independently selected from the group consisting of optionally substituted aliphatic, alicyclic and aromatic hydrocarbon groups, and each of m and n is an integer), an optical radical generating agent and an oxidizing agent.

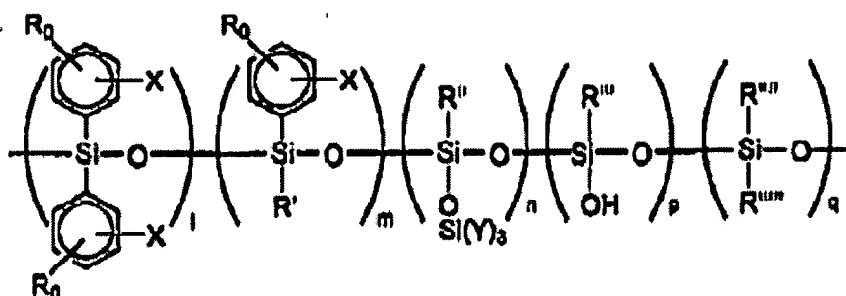
Further, the resist materials shown in the following formulae, which are disclosed in Japanese Unexamined Patent Publication No. 2002-20224, can be employed for the second resist layer 32.

The positive-type silicone-containing photosensitive composition comprising:

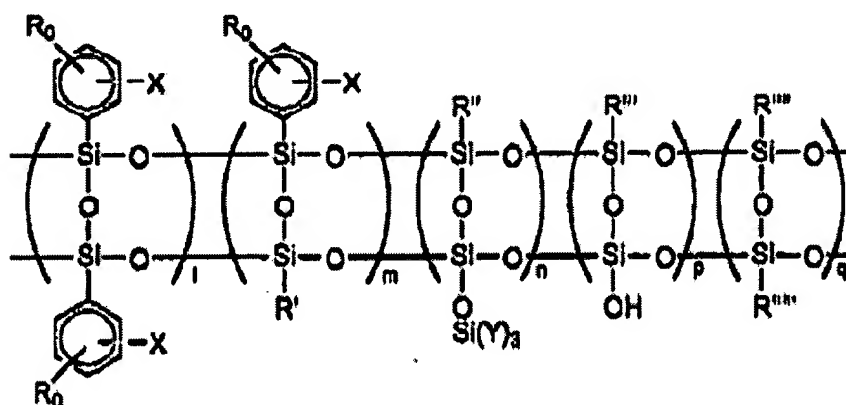
(a) a polymer which has a repeat unit expressed with the following general formula (I) and/or (II), and which is water-insoluble and alkali-soluble;

(b) a compound which generates an acid when subject to an activity beam of light or radiation; and

(c) a polymer which has in the side chain thereof a repeat unit expressed with the following general formula (III), the general formula (IV), or the general formula (V), and which exhibits properties that the solubility in an alkali developer increases due to the action of an acid.

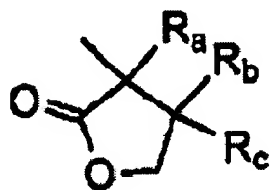


Formula I

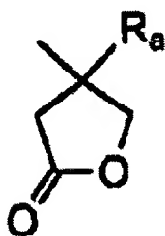


Formula II

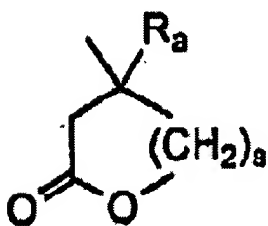
(X in formulae (I) and (II) is a group selected from the group consisting of $-C(=O)-R$ group, $-CH(OH)-R$ group, and a carboxyl group, and a plurality of X groups in the formula may be the same or different. R shows a hydrocarbon group which may have a hydrogen atom or a substitute therein. $R'-R''''$ may be the same or different, and is selected from the group consisting of an alkyl group, a cycloalkyl machine, an alkoxy group, an alkenyl group, an aralkyl group and a phenyl group all of which may have a hydroxyl group and/or a substituent. Y is an alkyl group, an alkoxy group or a siloxyl machine. R0 represents a group selected from the group consisting of an aliphatic hydrocarbon group and an aromatic hydrocarbon group which may have a hydrogen atom, a halogen atom and/or a substituent. Each of l, m, n and q is 0 or a positive integer, and p is a positive integer.)



Formula III



Formula IV



Formula V

(Each of R_a , R_b and R_c in formulae (III) – (V) is independently a hydrocarbon group which may have a hydrogen atom and/or a substituent. s is an integer equal to 2 or greater.)